WHAT IS CLAIMED IS:

1. A system for measuring speckle of a specimen, comprising:

a source of coherent light capable of being aimed at a specimen;

a camera capable of obtaining a plurality of images of the specimen; and

a processor coupled to said camera, said processor including software capable of performing speckle analysis on a plurality of images.

2. The system of Claim 1 wherein said software is capable of converting images to intensity values.

3. The system of Claim 2 wherein said software is capable of converting images stored in one of 8 bit bitmap, CIN, and JPEG formats.

4. The system of Claim 1 wherein said software is capable of normalizing said intensity values.

5. The system of Claim 1 wherein said camera is capable of obtaining at least one hundred images per second

6. The system of Claim 1 wherein said camera has a memory size capable of storing greater than 300 images.

7. The system of Claim 1 wherein said software is capable of performing a Fourier transform analysis on said plurality of images.

8. The system of Claim 1 wherein said software is capable of performing a Power Spectral Density analysis on said plurality of images.

9. The system of Claim 1 wherein said software is capable of performing a Fractal Dimension Calculation analysis on said plurality of images.

10. The system of Claim 1 wherein said software is capable of performing a Wavelet Transform analysis on said plurality of images.

11. The system of Claim 1 wherein said source of coherent light is a laser.

12. The system of Claim 11 wherein said source of coherent light includes a closed loop ring configuration to enhance the stability of speckle images.

13. The system of Claim 1 further comprising a source of vibration capable of vibrating the specimen.

14. The system of Claim 1 further comprising an optical device coupled to said source of coherent light and capable of expanding a beam of light emanating from said source of coherent light.

15. A method of measuring the vibration of a specimen, comprising the steps of:

projecting coherent light at a specimen;

obtaining a plurality of images of the specimen; and

performing speckle analysis on the plurality of images.

16. The method of Claim 15 wherein said step of obtaining images includes obtaining at least one hundred images per second.

17. The method of Claim 15 wherein said step of performing includes calculating a Fourier Transform analysis on the plurality of images.

18. The method of Claim 15 wherein said step of performing includes calculating a Power Spectral Density analysis on the plurality of images.

19. The method of Claim 15 wherein said step of performing includes calculating a Fractal Dimensional Calculation analysis on the plurality of images.

20. The method of Claim 15 wherein said step of performing includes calculating a Wavelet Transform analysis on the plurality of images.

21. The method of Claim 15 where said step of projecting includes projecting a laser at the specimen.

22. The method of Claim 15 where said step of projecting includes forming a closed loop ring configuration to enhance the stability of biospeckle images.

23. The method of Claim 15 further comprising the step of vibrating the specimen.